



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/544,193	08/02/2005	Cornelius Antonius Hezemans	FR 030012	8370
24737	7590	09/11/2009	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			HEYI, HENOK G	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2627	
			MAIL DATE	DELIVERY MODE
			09/11/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/544,193	<b>Applicant(s)</b> HEZEMANS ET AL.
	<b>Examiner</b> HENOK G. HEYI	<b>Art Unit</b> 2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 July 2009.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 and 2 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1 and 2 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 08/02/2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/146/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date: _____	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. On line 4 of claim 1, the term "reciprocally" is found. It is not clear what applicant meant by that in relation to the limitation of the claim. Applicant is requested to particularly point out what the invention is supposed to do.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda US 2001/0019526 A1 (Takeda hereinafter) in view of Schell et al. US 6,434,087 B1 (Schell hereinafter) and further in view of Kim et al. US 2003/0174617 A1 (Kim hereinafter).

Regarding claim 1, Takeda teaches a tray mechanism (mounting tray 3, Fig. 1) consisting of sliding means (slide means 4, Fig. 1) comprising an electrical tray motor (motor M 16, Fig. 1), for moving a tray- provided for containing a disc on which information is recorded - from a projected position, for the placement of the disc or its discharge, to a contained one, for the reproduction of recorded information, or reciprocally, and a drive power source, for supplying an applied voltage to said tray motor (The drive means 14 is composed mainly of an output motor 16, a drive source 8 for supplying an application voltage to the output motor 16, para [0048]), said sliding means also including control means for supplying different values of the voltage applied to the tray motor according to different mechanical functions controlled by said motor (wherein said slide means has: an output motor and a drive source for supplying an application voltage to the output motor, para [0015]) but Takeda is silent about said sliding means includes, for the tray steering, a motor current feed-forward loop comprising the following elements : a first direct branch, itself comprising in series a first amplifier of the input voltage applied to the loop, the tray motor and a resistor ; a second branch, the input of which is connected between the output of the tray motor and the input of the resistor that is not connected to the earth, said second branch itself comprising in series a second amplifier and an adder, and said adder receiving on one input the input voltage applied to the loop and on the other one the output of said second amplifier. However, Schell teaches an optical disc system with current monitoring circuit with feedback loop (see col 11 lines 9-26). Schell also teaches circuitry comprising resistors, amplifiers (see col 67 lines 59-65) and adders (see col 76

lines 44-58) see also Fig. 112. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical disc reproducing apparatus of Takeda to have a current feed loop. The modification would have been obvious because of the benefit of amplifiers and adders in increasing the power output of the motor as taught by Schell in the Cartridge loading explanation on page 2 and 3 of the specification. Both Takeda and Schell fail to teach that gain of the feed-forward loop is chosen such that an angular velocity of the tray motor is proportional to the input voltage. However, Kim teaches that the angular velocity of the disk is proportional to the voltage being applied (see para [0047]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to choose the amount of gain that would make the angular velocity of the tray proportional to the input voltage. The modification would have been obvious because of the benefit of regulating the input voltage in acquiring a desired rotational speed for the disk tray.

Regarding claim 2, Takeda teaches a disc reproducing apparatus comprising an apparatus body (Fig. 1), pickup means for picking up recorded information from a disc and a tray mechanism for sliding said disc (an apparatus main body including pickup means for picking up recorded information from an optical disc, para [0014], with respect to said apparatus body, either to a projected position, for the placement of the disc or its discharge, or to a contained position, for the reproduction of recorded information, said tray mechanism (mounting tray 3, Fig. 1) consisting of sliding means (slide means 4, Fig. 1) comprising an electrical tray motor (motor M 16, Fig. 1) and a drive power source for supplying an applied voltage to said tray motor (The drive means

14 is composed mainly of an output motor 16, a drive source 8 for supplying an application voltage to the output motor 16, para [0048]), said sliding means also including control means for supplying different values of the voltage applied to the tray motor according to different mechanical functions controlled by said motor at different moments (wherein said slide means has: an output motor and a drive source for supplying an application voltage to the output motor, para [0015]) but Takeda is silent about said sliding means includes, for the tray steering, a motor current feed-forward loop comprising the following elements : a first direct branch, itself comprising in series a first amplifier of the input voltage applied to the loop, the tray motor and a resistor ; a second branch, the input of which is connected between the output of the tray motor and the input of the resistor that is not connected to the earth, said second branch itself comprising in series a second amplifier and an adder, and said adder receiving on one input the input voltage applied to the loop and on the other one the output of said second amplifier. However, Schell teaches an optical disc system with current monitoring circuit with feedback loop (see col 11 lines 9-26). Schell also teaches circuitry comprising resistors, amplifiers (see col 67 lines 59-65) and adders (see col 76 lines 44-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical disc reproducing apparatus of Takeda to have a current feed loop. The modification would have been obvious because of the benefit of amplifiers and adders in increasing the power output of the motor as taught by Schell in the Cartridge loading explanation on page 2 and 3 of the specification. Both Takeda and Schell fail to teach that gain of the feed-forward loop is chosen such that an angular

Art Unit: 2627

velocity of the tray motor is proportional to the input voltage. However, Kim teaches that the angular velocity of the disk is proportional to the voltage being applied (see para [0047]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to choose the amount of gain that would make the angular velocity of the tray proportional to the input voltage. The modification would have been obvious because of the benefit of regulating the input voltage in acquiring a desired rotational speed for the disk tray.

#### **Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENOK G. HEYI whose telephone number is (571)270-1816. The examiner can normally be reached on Monday to Friday 8:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph H. Feild/  
Supervisory Patent Examiner, Art  
Unit 2627

/Henok G Heyi/  
Examiner, Art Unit 2627